

## **REMARKS**

This communication is considered fully responsive to the Office Action mailed February 14, 2006. Claims 1-78 are pending in this case. Claims 1-26 and 39-78 were examined with claims 27-38 withdrawn from consideration. Claims 1-26, 39-41, 44-47, and 54-78 standing rejected and claims 42, 43, and 48-53 allowed. Only claim 75 is hereby amended. No claims are cancelled. No claims are hereby added. Reexamination and reconsideration are respectfully requested.

### **Claim Rejections – 35 USC §102**

Claims 1 and 3 stand rejected under 35 USC §102(b) as being purportedly anticipated by the Japanese Patent to Koji, et al. No. 0467610 (hereafter referred to as “Koji”). Applicants respectfully traverse this rejection.

Primarily, it is not clear, even from the Examiner’s own explication of the Koji teaching that Koji necessarily discloses that the carbon or other particles could be used again. Noting that

"[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987); and see, MPEP 2131,

Koji apparently fails to meet this requirement. As such, this rejection is obviated and/or traversed and can be withdrawn.

Claims 1-3, 21-26, 64-67, and 77-78 stand rejected under 35 USC §102(b) as being purportedly anticipated by the U.S. Patent to Hayashida, No. 5,100,747 (hereafter referred to as “Hayashida”). Applicants respectfully traverse this rejection.

Applicants respectfully submit that Hayashida teaches devices and methods different from the characterizations of the Office Action of February 14, 2006. For a first example, no where in Hayashida is there a teaching of a “mix of recyclable carbon and binder particles.” This concept is not explicitly nor equivalently taught in Hayashida. Indeed, Hayashida neither teaches nor discloses anything about “recyclable” or “carbon” particles. Note, Hayashida does teach dry electrode manufacturing method, but teaches

the use of a hydrogen absorption alloy powder and not carbon and moreover does not teach the re-use of any particles of whatever type thereof. Thus, the “each and every element” rule of *Verdegaal Bros* indicates that Hayashida does not anticipate claim 1 or 21 or any claim dependent therefrom, namely claims 2, 3, and 22-26. Note, for claims 64-67 and 77-78, the lack of an element for “recyclable” is sufficiently deficient for these claims to not be anticipated by Hayashida either.

Note, this failure of Hayashida is sufficient to obviate, traverse or otherwise overcome the alleged rejections of claims 1-3, 21-26, 64-67 and 77-78 regardless any of the other assertions of the Office Action of February 14, 2006, i.e., those on page 3, line 1 through the first seven lines of page 5 (e.g., regardless the assertions respecting *In re Stephens, Wenzl and Browne*, inter alia), which are thus also obviated/traversed hereby.

Consequently, Applicants respectfully request withdrawal of the anticipation rejections on Koji and/or Hayashida, and further request a notation of the allowability of these claims thereover.

### **Claim Rejections – 35 USC §103**

Claims 4-13, 18, 54-63, 69-72, and 74-75 stand rejected under 35 USC §103(a) as being purportedly rendered obvious by the U.S. Patent to Hayashida, No. 5,100,747 (hereafter referred to as “Hayashida”) in view of the U.S. Patent to Goller et al., No. 4,313,972 (hereafter referred to as “Goller”). The Applicants respectfully traverse this rejection.

First of all, Applicants agree with the Examiner that Hayashida does not disclose recycled particles. However, Applicants disagree that Goller teaches that it is “well-known” in the art to recycle particles. It is true that Goller teaches that in its particular process, the excess may be reclaimed and can be readily reconditioned for possible re-use; however, this does not say that particles in any other electrode or cell manufacturing processes can be re-used. Indeed, the teaching of Goller may be very specifically limited to processes where powder clouds are used in so-called cloud chamber apparatus involving vacuum processing.

This is very different from the types of processing used in Applicants’ case, or in Hayashida, for that matter. There is nothing to suggest that a cloud process provides any

suggestibility of any particular part of the process therefore to either Applicants' process or to that of Hayashida.

Note, the law of obviousness requires that "there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings." See e.g., MPEP 2143, *inter alia* (and, see also, e.g., the citation therein to *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991), which was a case where the court concentrated in great detail upon what the prior art there actually "taught," "expressed," "conveyed," and/or "spoke of"). With no suggestion or motivation in or from the art for the alleged modification or combination of Hayashida with any other reference, let alone with a cloud production process such as that of Goller, the minimum *In re Vaeck* rule has not been met, and the reference teachings cannot be combined.

This rejection of any and all of claims 4-13, 18, 54-63, 69-72, and/or 74-75 is thus obviated/traversed and can be withdrawn. Applicants respectfully request that it be withdrawn. Note, this remains true regardless any of the other assertions of the Office Action of February 14, 2006, i.e., those on page 6, line 1 through the first four lines of page 12 (e.g., regardless the assertions respecting *In re Rose*, *inter alia*), which are thus also obviated/traversed hereby.

Claims 1 and 3 stand rejected under 35 USC §103(a) as being purportedly rendered obvious by the combination of Spillman (US Patent No. 6,245,464) in view of Lain (US Patent No. 6,447,669). The Applicants respectfully traverse these rejections.

First of all, Applicants agree *arguendo* with the Examiner that Spillman does not disclose recyclable particles. However, Applicants disagree that Lain teaches that it is "well-known" in the art to recycle particles, at least not in any fashion which is legally combinable with the teaching of Spillman. It is true that Lain teaches that in its particular process, the carbon and other materials may be reclaimed from cells for re-use; however, this does not say that such a reclamation from existent cells suggests recyclability in any other electrode or cell manufacturing processes. Indeed, the teaching of Lain may be very specifically limited to processes of reclamation of materials from fully formed and used cells and not suggesting incorporation into a purely manufacturing process such as that of Spillman.

There is at least nothing in or from the cited art to suggest that a reclamation process of Lain may be combined with the particular process of Spillman.

Again, the law of obviousness requires that “there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.” See e.g., MPEP 2143, *inter alia* (and, see also, e.g., the citation therein to *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991), which was a case where the court concentrated in great detail upon what the prior art there actually “taught,” “expressed,” “conveyed,” and/or “spoke of”). With no suggestion or motivation in or from the art for the alleged modification or combination of Spillman with any other reference, let alone with a reclamation process such as that of Lain, the minimum *In re Vaeck* rule has not been met, and the reference teachings cannot be combined.

This rejection of claims 1 and 3 is thus obviated/traversed and can be withdrawn. Applicants respectfully request that it be withdrawn. Note, this remains true regardless any of the other assertions of the Office Action of February 14, 2006, i.e., those on page 12, which are thus also obviated/traversed hereby.

Claims 4, 10-13, 18-20, 69, 71 and 73 stand rejected under 35 USC §103(a) as being purportedly rendered obvious by the combination of Koji (JP Patent No. 04067610) in view of Hirahara (US Patent No. 6,094,338). The Applicants respectfully traverse these rejections.

First of all, Applicants agree *arguendo* with the Examiner that Koji does not disclose recyclable particles. However, Applicants disagree that Hirahara teaches that it is “known” in the art to recycle particles. Applicants can find no mention in the background or non-example portions of the detailed description of Hirahara that assertedly teaches that the carbon and other film materials may be recycled or reused whether in its particular process or otherwise (note, the use of a recycled starting organic material such as “sawdust” for the creation of the film particles is not recycled or recyclable film particles themselves, i.e., the film particles, once made, being used again). Nevertheless, any alleged teaching of recyclability in Hirahara would be very specifically limited to production processes of Hirahara and not combinable with Koji or any other process. More specifically there is at least nothing in or from the cited art (either of

Hirahara or Koji) to suggest that any asserted recycling process of Hirahara may be combined with the particular process of Koji.

Again, the law of obviousness requires that “there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.” See e.g., MPEP 2143, *inter alia* (and, see also, e.g., the citation therein to *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991), which was a case where the court concentrated in great detail upon what the prior art there actually “taught,” “expressed,” “conveyed,” and/or “spoke of”). With no suggestion or motivation in or from the either or Koji or Hirahara (or otherwise from any other art) for the alleged modification or combination of Koji with any other reference, let alone with any potential recycling process such as that of Hirahara, the minimum *In re Vaeck* rule has not been met, and the reference teachings cannot be combined.

This rejection of claims 4, 10-13, 18-20, 69, 71 and 73 is thus obviated/traversed and can be withdrawn. Applicants respectfully request that it be withdrawn. Note, this remains true regardless any of the other assertions of the Office Action of February 14, 2006, i.e., those on page 13, line 1 through page 14, line 13, which are thus also obviated/traversed hereby.

Claims 4 and 7 stand rejected under 35 USC §103(a) as being purportedly rendered obvious by the combination of Andelman (US Patent No. 6,127,474) in view of Hirahara (US Patent No. 6,094,338). The Applicants respectfully traverse these rejections.

First of all, Applicants agree *arguendo* with the Examiner that Andelman does not disclose recyclable particles. However, Applicants disagree that Hirahara teaches that it is “known” in the art to recycle particles. Applicants can find no mention in the background or non-example portions of the detailed description of Hirahara that assertedly teaches that the carbon and other film materials may be recycled or reused whether in its particular process or otherwise (note, the use of a recycled starting organic material such as “sawdust” for the creation of the film particles is not recycled or recyclable film particles themselves, i.e., the film particles, once made, being used again). Nevertheless, any alleged teaching of recyclability in Hirahara would be very specifically

limited to production processes of Hirahara and not combinable with Andelman or any other process. More specifically there is at least nothing in or from the cited art (either of Hirahara or Andelman) to suggest that any asserted recycling process of Hirahara may be combined with the particular process of Andelman.

Again, the law of obviousness requires that “there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.” See e.g., MPEP 2143, *inter alia* (and, see also, e.g., the citation therein to *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991), which was a case where the court concentrated in great detail upon what the prior art there actually “taught,” “expressed,” “conveyed,” and/or “spoke of”). With no suggestion or motivation in or from the either or Andelman or Hirahara (or otherwise from any other art) for the alleged modification or combination of Andelman with any other reference, let alone with any potential recycling process such as that of Hirahara, the minimum *In re Vaeck* rule has not been met, and the reference teachings cannot be combined.

This rejection of claims 4 and 7 is thus obviated/traversed and can be withdrawn. Applicants respectfully request that it be withdrawn. Note, this remains true regardless any of the other assertions of the Office Action of February 14, 2006, i.e., those on page 14 through the first five lines of page 15, which are thus also obviated/traversed hereby.

Claims 4, 7-10, 12-13 and 59-62 stand rejected under 35 USC §103(a) as being purportedly rendered obvious by the combination of Gozdz (US Patent No. 5,478,668) in view of Bloch (EP Patent No. 1009058). The Applicants respectfully traverse these rejections.

First of all, Applicants agree *arguendo* with the Examiner that Gozdz does not disclose recyclable films. However, Applicants disagree that Bloch teaches that it is “known” in the art to recycle films, at least not in any fashion which is legally combinable with the teaching of Gozdz. It is true that Bloch teaches that in its particular process, the carbon and other materials, particularly the metal lithium, may be reclaimed from cells for re-use; however, this does not say that such a reclamation from existent cells suggests recyclability in any other electrode or cell manufacturing processes. Indeed, the teaching of Bloch may be very specifically limited to processes of

reclamation of materials from fully formed and used cells and not suggesting incorporation into a purely manufacturing process such as that of Gozdz. Note, Bloch appears only to discuss the re-use of the lithium metal, which does not suggest the particle reuse of Applicant here.

There is at least nothing in or from the cited art to suggest that a reclamation process of Bloch may be combined with the particular process of Gozdz.

Again, the law of obviousness requires that “there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.” See e.g., MPEP 2143, *inter alia* (and, see also, e.g., the citation therein to *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991), which was a case where the court concentrated in great detail upon what the prior art there actually “taught,” “expressed,” “conveyed,” and/or “spoke of”). With no suggestion or motivation in or from the art for the alleged modification or combination of Gozdz with any other reference, let alone with a reclamation process such as that of Bloch, the minimum *In re Vaeck* rule has not been met, and the reference teachings cannot be combined.

This rejection of claims 4, 7-10, 12-13 and 59-62 is thus obviated/traversed and can be withdrawn. Applicants respectfully request that it be withdrawn. Note, this remains true regardless any of the other assertions of the Office Action of February 14, 2006, i.e., those on page 15, line 8 through the first four lines of page 17, which are thus also obviated/traversed hereby.

Claim 64 stands rejected under 35 USC §103(a) as being purportedly rendered obvious by the combination of Gozdz (US Patent No. 5,478,668) in view of Lain (US Patent No. 6,447,669). The Applicants respectfully traverse these rejections.

First of all, Applicants agree *arguendo* with the Examiner that Gozdz does not disclose a recyclable films. However, Applicants disagree that Lain teaches that it is “known” in the art to recycle films, at least not in any fashion which is legally combinable with the teaching of Gozdz. It is true that Lain teaches that in its particular process, the carbon and other materials may be reclaimed from cells for re-use; however, this does not say that such a reclamation from existent cells suggests recyclability in any other electrode or cell manufacturing processes. Indeed, the teaching of Lain may be

very specifically limited to processes of reclamation of materials from fully formed and used cells and not suggesting incorporation into a purely manufacturing process such as that of Gozdz.

There is at least nothing in or from the cited art to suggest that a reclamation process of Lain may be combined with the particular process of Gozdz.

Again, the law of obviousness requires that “there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.” See e.g., MPEP 2143, *inter alia* (and, see also, e.g., the citation therein to *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991), which was a case where the court concentrated in great detail upon what the prior art there actually “taught,” “expressed,” “conveyed,” and/or “spoke of”). With no suggestion or motivation in or from the art for the alleged modification or combination of Gozdz with any other reference, let alone with a reclamation process such as that of Lain, the minimum *In re Vaeck* rule has not been met, and the reference teachings cannot be combined.

This rejection of claim 64 is thus obviated/traversed and can be withdrawn. Applicants respectfully request that it be withdrawn. Note, this remains true regardless any of the other assertions of the Office Action of February 14, 2006, i.e., those on page 17, which are thus also obviated/traversed hereby.

Claims 69-72 and 74 stand rejected under 35 USC §103(a) as being purportedly rendered obvious by the combination of Spillman (US Patent No. 6,245,464) in view of Bloch (EP Patent No. 1009058). The Applicants respectfully traverse these rejections.

First of all, Applicants agree *arguendo* with the Examiner that Spillman does not disclose recyclable particles. However, Applicants disagree that Bloch teaches that it is “known” in the art to recycle particles, at least not in any fashion which is legally combinable with the teaching of Spillman. It is true that Bloch teaches that in its particular process, the carbon and other materials, particularly the metal lithium, may be reclaimed from cells for re-use; however, this does not say that such a reclamation from existent cells suggests recyclability in any other electrode or cell manufacturing processes. Indeed, the teaching of Bloch may be very specifically limited to processes of reclamation of materials from fully formed and used cells and not suggesting



incorporation into a purely manufacturing process such as that of Spillman. Note, Bloch appears only to discuss the re-use of the lithium metal, which does not suggest the particle reuse of Applicant here.

There is at least nothing in or from the cited art to suggest that a reclamation process of Bloch may be combined with the particular process of Spillman.

Again, the law of obviousness requires that “there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.” See e.g., MPEP 2143, *inter alia* (and, see also, e.g., the citation therein to *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991), which was a case where the court concentrated in great detail upon what the prior art there actually “taught,” “expressed,” “conveyed,” and/or “spoke of”). With no suggestion or motivation in or from the art for the alleged modification or combination of Spillman with any other reference, let alone with a reclamation process such as that of Bloch, the minimum *In re Vaeck* rule has not been met, and the reference teachings cannot be combined.

This rejection of claims 69-72 and 74 is thus obviated/traversed and can be withdrawn. Applicants respectfully request that it be withdrawn. Note, this remains true regardless any of the other assertions of the Office Action of February 14, 2006, i.e., those on page 18, which are thus also obviated/traversed hereby.

Claims 39-41 and 44-47 stand rejected under 35 USC §103(a) as being purportedly rendered obvious by Koji (JP Patent No. 04067610). The Applicants respectfully traverse these rejections.

First of all, Applicants agree *arguendo* with the Examiner that Koji does not disclose recyclable particles, binder or otherwise. However, Applicants disagree that it is “well-known” in the art to recycle particles whether binders, polymers or otherwise; and, particularly not without any citation to any art source therefor.

Again, the law of obviousness requires that “there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.” See e.g., MPEP 2143, *inter alia* (and, see also, e.g., the citation therein to *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991), which was a case where the

court concentrated in great detail upon what the prior art there actually “taught,” “expressed,” “conveyed,” and/or “spoke of”). With no suggestion or motivation in or from either Koji or the uncited art for the alleged modification of Koji, the minimum *In re Vaeck* rule has not been met, and the reference teaching cannot be so modified.

This rejection of claims 39-41 and 44-47 is thus obviated/traversed and can be withdrawn. Applicants respectfully request that it be withdrawn. Note, this remains true regardless any of the other assertions of the Office Action of February 14, 2006, i.e., those on page 18, last 6 lines through the first 18 lines of page 20 (e.g., particularly in view of the allegation of *In re Aller*), which are thus also obviated/traversed hereby.

Claim 76 stands rejected under 35 USC §103(a) as being purportedly rendered obvious by the combination of Koji (JP Patent No. 04067610) in view of Yoshida (US Patent No. 5,150,283). The Applicants respectfully traverse this rejection.

First of all, Applicants agree *arguendo* with the Examiner that Koji does not disclose the roll and disposition within a housing. And, even though Applicants also agree that Yoshida generally teaches rolls and housings, Applicants nevertheless disagree that Yoshida and Koji combined teach the elements of claim 76. Koji and Yoshida fail to teach the “recyclable dry electrode” element and therefore the two citations fail to teach all of the elements as they must in order to render the claim obvious.

This rejection of claim 76 is thus obviated/traversed and can be withdrawn. Applicants respectfully request that it be withdrawn. Note, this remains true regardless any of the other assertions of the Office Action of February 14, 2006, i.e., those on page 21, which are thus also obviated/traversed hereby.

Claims 14 and 15 stand rejected under 35 USC §103(a) as being purportedly rendered obvious by the combination of Amatucci (US Patent No. 6,181,545) in view of Hirahara (US Patent No. 6,094,338). The Applicants respectfully traverse these rejections.

First of all, Applicants agree *arguendo* with the Examiner that Amatucci does not disclose recyclable particles. However, Applicants disagree that Hirahara teaches that it is “known” in the art to recycle particles. Applicants can find no mention in the background or non-example portions of the detailed description of Hirahara that assertedly teaches that the carbon and other film materials may be recycled or reused

whether in its particular process or otherwise (note, the use of a recycled starting organic material such as “sawdust” for the creation of the film particles is not recycled or recyclable film particles themselves, i.e., the film particles, once made, being used again). Nevertheless, any alleged teaching of recyclability in Hirahara would be very specifically limited to production processes of Hirahara and not combinable with Amatucci or any other process. More specifically there is at least nothing in or from the cited art (either of Hirahara or Amatucci) to suggest that any asserted recycling process of Hirahara may be combined with the particular process of Amatucci.

Again, the law of obviousness requires that “there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.” See e.g., MPEP 2143, *inter alia* (and, see also, e.g., the citation therein to *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991), which was a case where the court concentrated in great detail upon what the prior art there actually “taught,” “expressed,” “conveyed,” and/or “spoke of”). With no suggestion or motivation in or from the either or Koji or Hirahara (or otherwise from any other art) for the alleged modification or combination of Amatucci with any other reference, let alone with any potential recycling process such as that of Hirahara, the minimum *In re Vaeck* rule has not been met, and the reference teachings cannot be combined.

This rejection of claims 14 and 15 is thus obviated/traversed and can be withdrawn. Applicants respectfully request that it be withdrawn. Note, this remains true regardless any of the other assertions of the Office Action of February 14, 2006, i.e., those on page 21 through page 22, which are thus also obviated/traversed hereby.

Claims 16 and 17 stand rejected under 35 USC §103(a) as being purportedly rendered obvious by the combination of Amatucci (US Patent No. 6,181,545) in view of Hirahara (US Patent No. 6,094,338) and further in view of Yoshida (US Patent No. 5,150,283). The Applicants respectfully traverse this rejection.

First of all, Applicants agree *arguendo* with the Examiner that Amatucci and Hirahara do not disclose the roll and disposition within a housing. And, even though Applicants also agree that Yoshida generally teaches rolls and housings, Applicants nevertheless disagree that Yoshida combined with Amatucci and Hirahara teach the

elements of claims 16 and 17. Amatucci, Hirahara and Yoshida fail to teach the “wherein at least some of the particles are recycled particles” element and therefore the three citations fail to teach all of the elements as they must in order to render the claim obvious.

This rejection of claims 16 and 17 is thus obviated/traversed and can be withdrawn. Applicants respectfully request that it be withdrawn. Note, this remains true regardless any of the other assertions of the Office Action of February 14, 2006, i.e., those on page 22, which are thus also obviated/traversed hereby.

**Allowable Subject Matter**

Applicants note with appreciation the notation that claims 42, 43 and 48-53 are allowed.

**Conclusion**

Based on the amendments and remarks herein, the Applicants respectfully request prompt issuance of a notice of allowance for claims 1-26 and 39-78 in this matter.

Dated: \_\_\_\_\_

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By: \_\_\_\_\_

Respectfully Submitted,

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